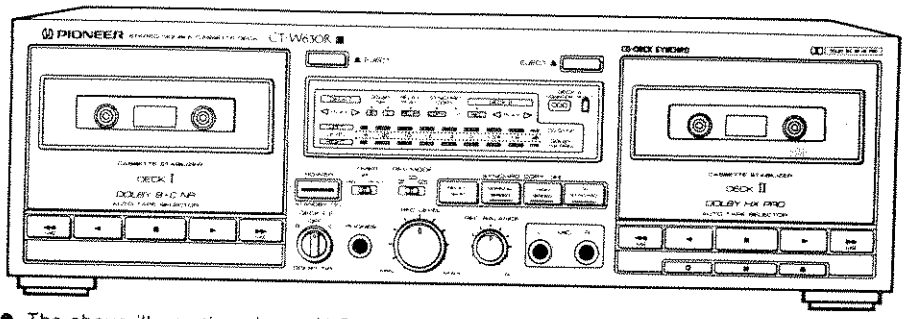
Operating Instructions

STEREO DOUBLE CASSETTE DECK

CT-W630R
CT-W530R



● The above illustration shows U.S. model of CT-W630R.

Thank you for buying this Pioneer product.
Please read through these operating instructions so you will know how to operate your unit properly. After you have finished reading the instructions, keep the manual in a safe place for future reference.
In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the drawings. However, the method of connecting and operating the unit is the same.

WARNING:TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

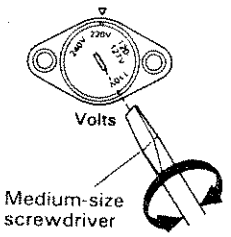
IMPORTANT NOTICE
[For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep it in a secure area. This is for your security.

LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.
Main voltages in Saudi Arabia are 127V and 220V only. Never use this model with a 110V setting in Saudi Arabia.
The line voltage selector switch is on the rear panel. Before your model is shipped from the factory, this switch is set to the power requirements of the destination. Check that it is set properly before plugging the power cord into the AC outlet. If the voltage is not properly set or if you move to an area where the voltage requirements differ,adjust the selector switch as follows.

1. Disconnect the power cord.
2. Use a medium-size screwdriver.
3. Insert the screwdriver into the groove on the voltage selector, and adjust so that the tip of the arrow points to the voltage value of your area.



"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

PIONEER®
The future of sound and vision.

IMPORTANT 1

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off.

FOR USE IN THE UNITED KINGDOM

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured marking identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.
Neither wire is to be connected to the earth terminal of a three pin plug.
Equipment sold in the U.K. is not supplied with a power plug.

SAFETY INSTRUCTIONS

READ INSTRUCTIONS – All the safety and operating instructions should be read before the appliance is operated.

RETAIN INSTRUCTIONS – The operating instrucions should be retained for future reference.

HEED WARNING – All warnings on the appliance and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS – All operating and use instructions should be followed.

WATER AND MOISTURE – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

LOCATION – The appliance should be installed in a stable location.

WALL OR CEILING MOUNTING – The appliance should not be mounted to a wall or ceiling.

VENTILATION – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

HEAT – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

POWER SOURCES – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

POWER-CORD PROTECTION – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

POLARIZATION – If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

CLEANING – The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

POWER LINES – An outdoor antenna should be located away from power lines.

NONUSE PERIODS – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

OBJECT AND LIQUID ENTRY – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

DAMAGE REQUIRING SERVICE – The appliance should be serviced by a Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped; or the enclosure damaged.

SERVICING – The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

OUTDOOR ANTENNA GROUNDING – If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.
In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Fig. A.

CART – An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

NEC – NATIONAL ELECTRIC CODE

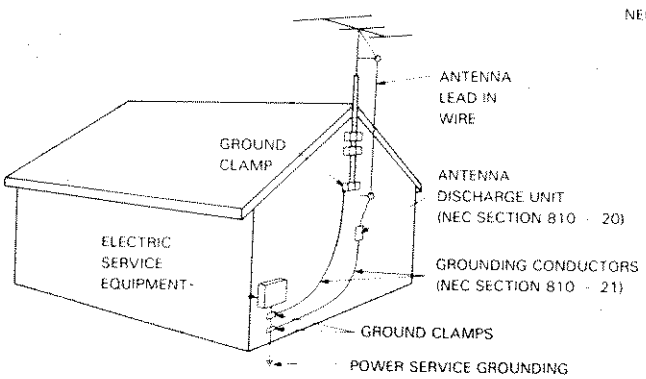

ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810 – 20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810 – 21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

FIG A

CONTENTS

Installation 3
Connections 4
How to Handle Cassette Tapes 5
Front Panel Facilities 6
Tape Transport Mode Indicators 8
Playback 9
Recording 11
Timer Recording/Playback 12
CD-deck Synchro Recording 13
Troubleshooting 14
Maintenance 15
Specifications ..... Back cover

INSTALLATION

When installing the deck, avoid locations with high temperature or humidity, and be sure that the location is well ventilated.

Do not install the deck in locations subject to direct sunlight, or next to a space heater or other heating device, since the finish or internal parts may be affected adversely. Malfunctions may also result if the unit is installed in a humid or dusty location. Also avoid installations next to kitchen counters or other places subject to oily smoke.

- If you place the unit directly on top of an amplifier, it may pick up humming or other noise. Also, if the amplifier generates a large amount of heat, the unit may break down.
- If you place the unit near a television set, it may pick up noise which may be recorded as a whistling tone on the tape. In such a case, either install the unit away from the television set or switch OFF the television set.

NOTE:
When installing the cassette deck, do not place a cloth over the top or block the ventilation openings in any other way while unit is ON.

DEW CONDENSATION

When the unit is moved from a cold to a warm room, or the temperature changes quickly, condensation will form on the mechanical parts and this will affect the performance of the tape. In such cases, leave the unit in a warmer atmosphere for about one hour or change the room temperature gradually.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

INFORMATION TO USER [FOR U.S. MODEL]

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- reorient the receiving antenna
- relocate this equipment with respect to the receiver
- move this equipment away from the receiver
- plug this equipment into a different outlet so that equipment and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful:
"How to Identify and Resolve Radio-TV Interference Problems"
This booklet is available from the US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4

The above instructions apply only to units which will be operated in the United States.

[For Canadian model]

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

[Pour le modèle Canadien]

L'interférence, radioélectrique générée par cet appareil numérique de type B ne dépasse pas les limites énoncées dans le Règlement sur les perturbations radioélectriques, section appareil numérique, du Ministère des Communications.

CONNECTIONS

- **Read through the operating instructions of the stereo components which you intend to connect to this unit.**
- **Turn on the power only after all the connections are completed.**
- **Make sure that the plugs are inserted securely. Improper connection may generate noise.**

PIONEER System Remote Control

(Not on European model of CT-W630R.)

Connect the CONTROL IN jack to a component equipped with the PIONEER System remote control (bearing the mark), and you will be able to operate this component from the hand-held remote controller that comes with the component connected. (Only deck II can be operated when the remote control unit is not equipped with independent keys for deck I and deck II or when there is no selection key for deck I and deck II.)

Refer to page 9 for the procedure for operating deck I with PIONEER Remote control units not designed for double decks.

CD•DECK SYNCHRO jack

If this unit is used together with a PIONEER CD player equipped with the synchro function, synchro recording from the CD player can be carried out with one touch of a button. (See page 13) Use the supplied CD•Deck synchro control cord to connect the CD•DECK SYNCHRO jack on this unit to the CD•DECK SYNCHRO jack on the CD player.

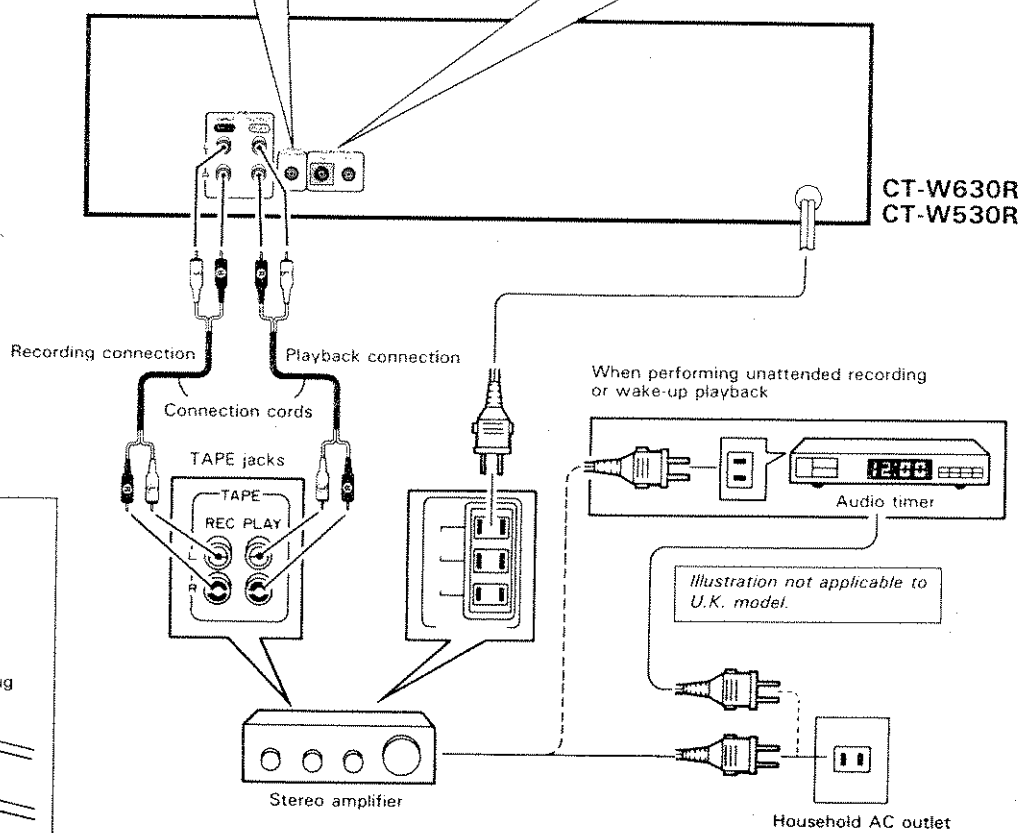
(Not on European model of CT-W630R.)

CONTROL IN jack

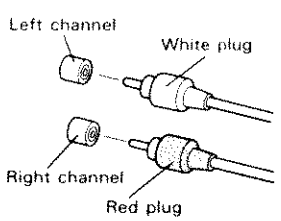
Connect this jack to the CONTROL OUT jack of a component equipped with the PIONEER System Remote Control (bearing the mark) using the supplied remote control cord, and you will be able to operate this component using the system remote control.

CONTROL OUT jack

Intermediary output of remote control signals from the above input jack. Connect it to the CONTROL IN jack of another component compatible with the PIONEER System Remote Control.



Connecting the input/output cords
Connect the plugs properly.



HOW TO HANDLE CASSETTE TAPES

CHECK CASSETTE BEFORE USE

Bear in mind the following points before loading cassette tapes.

Is the tape loose, or is some of the tape outside the cassette?

If some of the tape is projecting outside the cassette shell or if it is loose, it may not enter between the capstan and pinch roller. This will prevent the tape from being supplied or damage the tape itself. In cases like these, insert a pencil into the reel hole and take up the slack (Fig. A.).

Some cassette tapes come with a plastic or thick paper stopper which prevents tape slack. Remove this stopper when loading the tape and replace it after using the cassette.

What are the accidental erasure prevention tabs for?

A cassette is provided with these tabs so that important or otherwise valuable recordings will not be erased accidentally.

When the tab (Fig. B) on the cassette shell is broken off with the tip of a screwdriver, it will not be possible to activate the recording function by pressing the recording (●) button, so valuable recordings will not be erased in error.

To re-record a cassette on which tabs have been broken off, simply stick a piece of adhesive tape over the tab areas, as shown in Fig. C.

NOTES:

- *The accidental erasure prevention tabs are located at the top left on both sides A and B (1 and 2), so that material on each side can be prevented from being erased in error.*
- *When breaking off the tab on the cassette shell, do not use a magnetized screwdriver.*

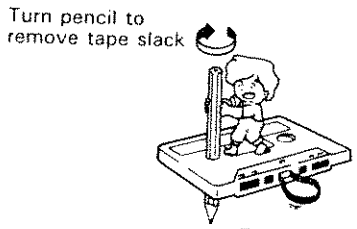


Fig. A

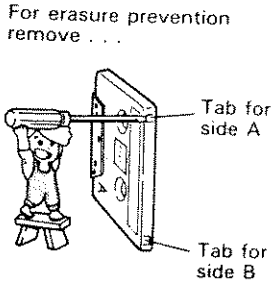


Fig. B

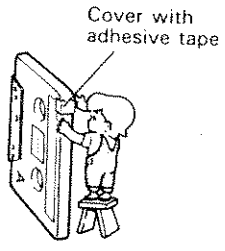


Fig. C

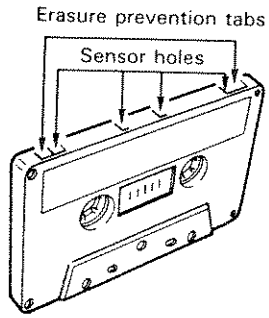
AUTOMATIC TAPE SELECTOR FUNCTION

This unit (Deck I and Deck II) is equipped with an automatic tape selector function which utilizes the sensor holes on the tape cassette to determine the type of tape being used, in order to set the deck to match the tape recording bias and equalization of the tape. In case of metal tape or chrome tape, take sufficient care not to block detection holes (Fig. D, Fig. E).

When there holes are blocked, the automatic tape selector mechanism does not operate correctly.

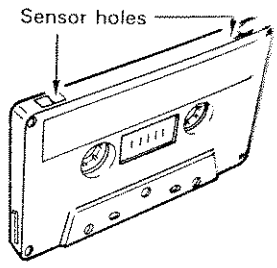
REGARDING THE TAPE CASSETTE SENSOR HOLES

- Do not use FeCr tapes with this unit.
- When using metal tapes, be sure the tape cassettes have sensor holes.



Metal tape

Fig. D



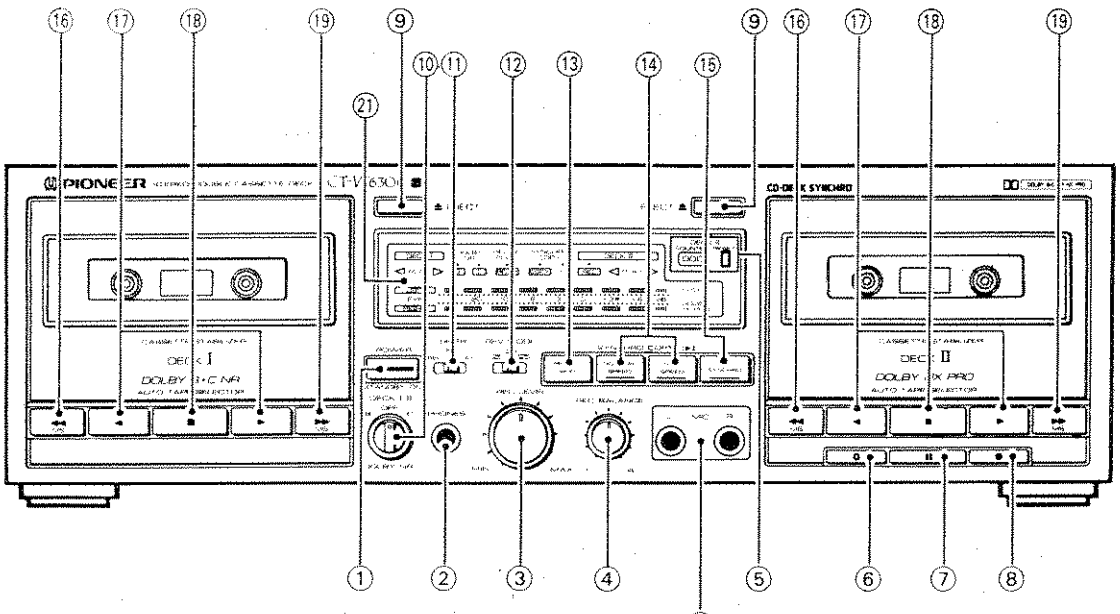
CrO_2 tape

Fig. E

TIPS ON USING CASSETTE TAPES

- Leader tape (which does not allow sound to be recorded on it) is provided at the beginning of a cassette tape. Start recording after allowing the tape to run for about 5 seconds so that the leader tape clears the recording head.
- Do not leave a cassette tape exposed to the environment. Store the cassette in its case so that dust and dirt do not adhere to the tape after use, and so that the tape is prevented from becoming slack. Choose a location which is not exposed to the effects of magnetism, dust, dirt and oil for storing the tapes.
- Because C-120 tapes are extremely thin, they easily jam in the pinch roller and capstan, and they are susceptible to other troubles such as irregular winding. Try not to use them with this unit.

FRONT PANEL FACILITIES



⑳ (CT-W630R only)

① POWER (STANDBY/ON) switch

The unit POWER switch is geared to selecting the transformer secondary and so even at the STANDBY position, the unit circuitry will work as long as the power cord is connected to a power outlet.

② PHONES jack

To insert headphones jack.

③ REC LEVEL control

④ REC BALANCE control

Balances the recording level between left (L) and right (R) channels. (See page 11)

⑤ DECK II tape COUNTER and RESET button

Resets the tape counter reading to "000".
(The tape COUNTER works for deck II only.)

⑥ Recording mute button (O)

Pressing this button during recording, creates a blank portion of approximately 4 seconds on the tape. The unit then enters the recording pause mode. (See page 11)

⑦ Pause button (▮▮)

Stops tape transport temporarily during recording or playback. Press the button again to resume operation. (This can also be done by pressing the Play (▶ or ◀) button.) This button does not work during fast-forward and rewind.

⑧ Recording button (●)

When the recording (●) button is pressed, the unit is set to recording standby mode. Press the pause (▮▮) button or playback (▶ or ◀) button when ready to record.
The unit will not enter the recording standby if a cassette with broken erasure prevention tabs is loaded.
Only deck II is equipped with a recording function.

⑨ EJECT button (⏏)

Press to open the cassette door after you have pressed the stop (■) button and the tape has stopped.

NOTE:
If the power is turned off while the tape is moving, the cassette door may remain locked. In this case, turn the power on before pressing the EJECT button (⏏).

⑩ DOLBY* NR switch

Set this switch to B or C for recording with the built-in Dolby Noise Reduction Systems and for playback of tapes which have been recorded using the Dolby Noise Reduction Systems. To play other tapes, set the DOLBY NR switch to OFF.
When the DOLBY NR switch is set to ON, the MPX filter function operates in synchronization with the Dolby noise reduction system. The operation of this filter may causes some high frequencies to be muted when the Dolby NR system is used for recording of FM broadcasts from some tuners.

*

- *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*
- *"DOLBY" and the double-D symbol ▯▯ are trademarks of Dolby Laboratories Licensing Corporation.*

(CT-W630R only)

- *Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen.*
- *"DOLBY", the double-D symbol ▯▯ and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.*

NOTE:
When playing back Dolby NR-encoded tapes, always set this switch to the same position (B or C) used for recording.

⑪ TIMER mode selector

OFF:
Normally, be sure to leave the selector in this position except for repeat playback.

REC:
Set to this position for timer recording. (See page 12)

PLAY:
Set to this position for timer playback. (See page 12)

- Recording or playback may suddenly start when turning power on with this selector in the REC or PLAY position.
- When the selector is set to the PLAY position and the unit is turned on with POWER switch ① or an audio timer, the unit automatically enters the playback mode.

⑫ REV MODE (reverse mode) selector

⇀ :
Tape transport stops after one side of a tape is played or recorded.

⇄ :
When the forward playback (▶) button is pressed, each side of the tape is played or recorded once. When the reverse playback (◀) button is pressed to play or record on the tape, tape transport stops at the end of the reverse side (the side facing away from you when you loaded the tape).

↻ :
When the forward playback (▶) button is pressed, both sides of the tape are played continuously until 32 sides have been played. When the reverse playback (◀) button is pressed, both sides of the tape are played continuously until 31 sides have been played. In record mode, both sides of the tape are recorded once and then tape transport stops.

⑬ RELAY/SKIP button

Press this button to perform relay playback from deck I to deck II or from deck II to deck I.
When this button is pressed and a blank section of more than 15 seconds is encountered during playback, the unit fast forwards the tape to the beginning of the next selection and playback starts at that point.

⑭ SYNCHRO COPY (I▶II) buttons

NORMAL SPEED:
Starts tape copy at normal speed from deck I to deck II.

HIGH SPEED:
Starts tape copy at double speed (half time, from deck I to deck II).

⑮ CD SYNCHRO button

This button is used to carry out CD-Deck synchro recording from a CD player. (See page 13)

⑯ Fast reverse button (◀◀, MS)

To fast-reverse the tape in the direction of the arrows. When pressed during playback, the unit will skip one selection each time the button is pressed, then starts playback from the beginning of the next selection. (See page 10)

⑰ Playback button (▶ or ◀)

Play ▶:
Press this button to play back or record on the forward side of the tape (the side facing you). (Forward playback/recording)
Used to start recording in record-standby mode.

Play ◀:
Press this button to play back or record on the reverse side of the tape (the side facing away from you). (Reverse playback/recording)
Used to start recording in record-standby mode.

⑱ Stop button (■)

To stop all operations, including tape copy.

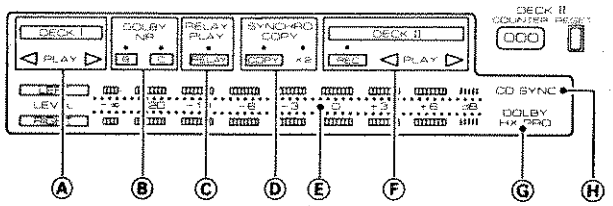
⑲ Fast forward button (▶▶, MS)

To fast-forward the tape in the direction of the arrows. When pressed during playback, the unit will skip one selection each time the button is pressed, then start playback from the beginning of the next selection. (See page 10)

⑳ MIC-L/R jacks (CT-W630R only)

To insert the plugs of the microphones L and R.

㉑ Operating Display



Ⓐ DECK I Tape Transport Mode Indicators
(See page 8)

Ⓑ DOLBY NR Indicator

- When Dolby NR is off

- Dolby B-type NR on

- Dolby C-type NR on

Ⓒ RELAY PLAY Indicator
Lights up when RELAY/SKIP button is pressed to start relay playback or to activate skip mechanism.

Ⓓ SYNCHRO COPY Indicator
Lights up during the tape copy operation.

- Normal-speed copy

- High-speed copy

Ⓔ LEVEL Meter
Holds peak indications for about 1.2 second. The ▯▯ beside the +3 dB mark indicates the Dolby NR systems standard level.

Ⓕ DECK II Tape Transport Mode Indicators
(See page 8)

Ⓖ DOLBY HX PRO indicator (CT-W630R only)
This unit is provided with a built-in Dolby HX PRO Headroom Extension circuit. The DOLBY HX PRO indicator always appears on the display when the POWER switch is turned on

Ⓗ CD SYNCHRO indicator
Lights when synchro recording from a CD player is being carried out.

TAPE TRANSPORT MODE INDICATORS

Show the tape transport condition as indicated below for either deck I or deck II.

Modes common to both deck I and deck II

Mode	Forward mode	Reverse mode
Stop	Lights steadily	Lights steadily
Playback	Lights steadily	Lights steadily
Fast-forward	Flashing quickly	Flashing quickly
Fast-reverse	Flashing quickly Lights steadily	Lights steadily Flashing quickly
Forward music search	Flashing quickly	Flashing quickly
Reverse music search	Flashing quickly Lights steadily	Lights steadily Flashing quickly

Modes on deck II only

Mode	Forward mode	Reverse mode
Playback pause	Lights steadily Flashing slowly	Flashing slowly Lights steadily
Record	Lights steadily Lights steadily	Lights steadily Lights steadily
Recording pause	Lights steadily Flashing slowly	Lights steadily Flashing slowly
Recording mute	Flashing slowly Lights steadily	Flashing slowly Lights steadily

REVERSE MODE SWITCH (REV MODE)

Operates in the same way for both decks I and II.
There are three kinds of reverse mode:

One-way mode: position
Allows recording or playback of one side of the cassette tape. The operation stops automatically (auto stop) when the tape reaches its end.

Two-way mode: position
Allows recording or playback of both sides of the cassette tape. When the tape reaches its end on one side, the direction is automatically reversed so as to record (or play) the other side. Note that this function operates only when it is begun from the forward direction. If it is begun from the reverse direction, the tape will stop automatically when the reverse direction side of the tape has completed recording or playback.

Repeat mode: position
Both sides of the tape will be played back continuously until the stop (■) button ⑱ is pressed, or until the tape has been played back six full times (twelve sides), whichever comes sooner. During playback, if the unit is placed in the pause mode and then play is resumed, the repeat mode will be initiated again, resulting in another full six playbacks. If this mode is begun during recording, the unit will switch to the two way mode.

THE AUTO REVERSE MECHANISM

This unit uses the same rotary head for both the forward and reverse directions.

PLAYBACK

SINGLE PLAYBACK

(Using only one deck, either deck I or deck II)

1. **Insert a recorded tape.**
2. **Set DOLBY NR switch ⑩.**
3. **Set REV MODE selector ⑫.**
   (See page 8.)
4. **Set the stereo amplifier for tape playback.**
5. **Press the playback (▶ or ◀) button ⑰.**

- Playback can be performed on either deck I or deck II, only one at a time.
- Always set DOLBY NR switch ⑩ to the same position used for recording.

To Momentarily Stop Playback (Using only deck II)

- Press the pause (▮▮) button ⑦.
- To resume playback, press the pause (▮▮) button ⑦ or the playback (▶ or ◀) button ⑰.

When Playback is Finished

Press the stop (■) button ⑱.

BLANK SKIP

(Skipping unrecorded portions during playback)

Press RELAY/SKIP button ⑬, turning the corresponding indicator on. In this mode, when an unrecorded portion continues for more than 15 seconds, the unit will fast-forward the tape to the beginning of the next recorded position, then resume playback from there.

OPERATION OF DECK I USING A REMOTE CONTROL UNIT NOT DESIGNED FOR DOUBLE DECKS (Not on European model of CT-W630R)

[Operation of deck I]

Perform the following operation when turning the power of this unit on.
Turn on the power while pressing the stop (■) button ⑱ for deck I. Hold the stop (■) button ⑱ down for approximately 5 seconds. Operation of deck I will now be possible.

[Switching operation from deck I to deck II]

With deck II stopped, press the deck II stop (■) button ⑱. Operation of deck II will now be possible.
Operation can be switched back to deck I from deck II by pressing, the stop (■) button ⑱ of deck I again while deck I is stopped.

NOTE:
When a power failure or another sudden change in power supply (caused by lighting, etc.) occurs during operation of the unit, it will be reset to the OFF state. To restart operation, please repeat the steps described above.

RELAY PLAYBACK

(Using both decks for continuous playback)

1. **Insert recorded tapes in both decks.**
2. **Set DOLBY NR switch ⑩.**
3. **Set REV MODE selector ⑫.**
   (See page 8.)
4. **Set the stereo amplifier for tape playback.**
5. **Press RELAY/SKIP button ⑬.**
   The [RELAY] indicator will light up.
6. **Press the playback (▶ or ◀) button ⑰ of the deck where playback is to start.**

To Momentarily Stop Playback (Using only deck II)

- Press the pause (▮▮) button ⑦.
- To resume playback, press the pause (▮▮) button ⑦ or the playback (▶ or ◀) button ⑰.

When Playback is Finished

Press the stop (■) button ⑱.

- Continuous playback can be performed either from deck I to deck II or from deck II to deck I.
- For relay playback, always use tapes recorded with the same Dolby NR version, and set DOLBY NR switch ⑩ to the same position used for recording.
- When playback finishes in one deck, and operation stops automatically at the tape end, the other deck will search for the beginning of the first selection and start playback.
- You can replace tapes already listsended to during playback on the other deck, for continuous playback of different tapes. This is a convenient feature for party, background music, etc.
- If mute playback continues for more than 15 seconds with the [RELAY] indicator lit, the blank skip function will automatically search for the beginning of the next selection and resume playback from there.
  To cancel relay playback, press RELAY/SKIP button ⑬ once again (turning the [RELAY] indicator off).

Differences between playback direction settings during relay playback and reverse modes:

Tape play mode at beginning of playback		Reverse mode		
Deck I	Deck II	One-way	Two-way	Repeat
▶	▶	F→F	FR→FR	FR→FR→FR...
▶	◀	F→R	FR→FR	FR→FR→FR...
◀	▶	R→F	R→FR	R→FR→FR...
◀	◀	R→R	R→FR	R→FR→FR...

In the two-way and repeat modes, relay playback is always begun from the forward direction.
F: Forward playback R: Reverse playback
→: Relay playback

MS (MUSIC SEARCH) (To return to the beginning of the present selection or advance to the next selection.)

MUSIC SEARCH

(Skipping forward or backward to play back a desired selection)

The music search function detects blanks (longer than 4 seconds) between selections, advances the tape in the forward or reverse direction to find the beginning of the desired selection and automatically starts playback.
It can find a selection located up to 15 selections before or after the present position.

During Forward Playback

When you wish to locate the next song or beyond, press the ▶▶ button ⑲ as many times as the number of songs to be skipped. When you wish to listen to the song being currently played from the beginning, press the ◀◀ button ⑯ once. To return to the previous song or beyond, press the ◀◀ button ⑯ as many times as the number of songs to be skipped, plus one.

During Reverse Playback

When you wish to locate the next song or beyond, press the ◀◀ button ⑯ as many times as the number of songs to be skipped. When you wish to listen to the song being currently played from the beginning, press the ▶▶ button ⑲ once. To return to previous song or before, press the ▶▶ button ⑲ as many times as the number of songs to be skipped plus one.

From the Stop Mode

Press the playback (▶ or ◀) button ⑰ to set the playback mode, then press the ◀◀ ⑯ or ▶▶ ⑲ button to perform music search as mentioned above.

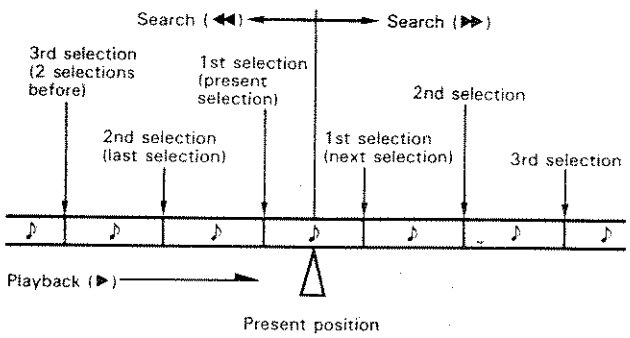
■ If the button is pressed more times than the number of selections recorded on the tape, forward search will continue on the opposite side, but reverse search will stop at the tape end.

NOTES:
In the following cases, the music search function may be unable to properly detect blanks between selections, thus operating incorrectly. This is not, however, a sign of unit malfunction.

- *When using a tape with blanks between selections less than 4 seconds long.*
- *When listening to tapes having long low-level intervals, like classical music, or with sound breaks several seconds long within selections.*
- *When listening to recorded conferences or talk shows, where sound is interrupted.*
- *When using tapes with noise in the blanks between selections.*

How Selections are Counted

When starting the music search operation from the middle of a selection and specifying "1st previous selection," playback will return to the beginning of the present selection. To return to selections further back, count one extra selection.



■The Dolby NR Systems

The Dolby NR systems are designed to reduce high-frequency noise (tape hiss) generated during playback. The level of low-volume, high-frequency sounds is increased during recording, and decreased by the same amount during playback to restore the original level. At the same time, high-frequency noise (the most easily perceived by the human ear) is attenuated as well.
Dolby B-type NR systems reduces high-frequency tape noise, widening the dynamic range.
Dolby C-type NR is even more powerful, applying the noise reduction effect to a wider spectrum of frequencies from the middle range.

■The Dolby HX PRO Headroom Extension System (CT-W630R only)

When recording audio signals on a magnetic tape, high-frequency signals are recorded on top of each other (recording bias) in order to compensate for the tape Recording bias depends on the frequency of the recorded sound, but generally it is fixed to a value which gives acceptable results over the whole frequency range.
The HX PRO system reads in the signal at the recording head, adjusting recording bias amplitude according to the signal condition to achieve optimum recording characteristics.

NOTE:
Avoid playingback tapes recorded using the Dolby NR systems with DOLBY NR switch in the OFF position, or tapes recorded without Dolby NR systems with DOLBY NR switch in the ON position (B or C), since this does not allow faithful reproduction of the original sound.

RECORDING (Using only deck II)

1. **Insert a blank tape.**
2. **Set DOLBY NR switch ⑩.**
3. **Set REV MODE selector ⑫.**

   To record on both sides of the tape, set the switch to the " ⇄ " or " ⇄ " position. To record on only one side of the tape, set the switch to the " → " position.
4. **Press the recording (●) button ⑧.**
5. **Select the recording source at the stereo amplifier.**
6. **Adjust the recording level.**

   Adjust the REC LEVEL control ③ so that the +3 dB mark in the level meter lights up. The +6 dB mark may light up momentarily.

   When recording without Dolby NR systems adjust REC LEVEL control ③ level up to about 0 dB.
7. **Press the playback (▶ or ◀) button ⑰.**

   Double side recording (REV MODE switch ⑫ : ⇄ or ⇄)

   Press the ▶ button. If the ◀ button is pressed, recording will stop after only one side is recorded. Switching from the reverse direction to the forward direction in this state is not possible.

To Temporarily Stop Recording

- Press the pause (▮▮) button ⑦.
- To resume recording, press the pause (▮▮) button ⑦ or playback (▶ or ◀) button ⑰.

When Recording is Finished

Press the stop (■) button ⑱.

Adjusting the Recording Level

Recording level adjustment is the most important factor in achieving good recording results. A high recording level helps to improve signal-to-noise ratio and dynamic range, but if excessively high it results in distortion. On the other hand, if level is set too low out of fear of distorting the sound, irritating tape hiss will become noticeable in the recording. Not only tape characteristics differ depending on the maker and kind of tape, but also for tapes with the same specifications. You can get the most of any tape and obtain good recordings if you adjust the recording level to a value close to the maximum recording level of the tape.

The level meter has a peak holding function which displays peak levels for about 1.2 seconds, making level adjustment easy even for music with high-level sound bursts.

NOTES:

- *When a cassette without erasure prevention tabs is loaded, the unit will not enter the recording mode when the recording (●) button ⑧ is pressed. When performing two-way recording, make sure that both tabs are intact.*
- *Always start two-way recording from the forward side. Operation will stop automatically at the tape-end if starting from the reverse side.*

Recording balance adjustment

Due to the source to be recorded or the equipment used for playback, the sound volume balance between left and right may be shifted to one side. In this case perform fine adjustment using REC BALANCE control ④.

Recording mute

(Creating blanks on the tape)

Use this function to create the 4-second blanks required for the music search operation.

- Press the record muting (○) button ⑥ during recording, and the unit will stop recording sound on the tape for about 4 seconds, then enter the recording pause mode.
- To create a blank more than 4 seconds long, hold the button down for the desired time. The unit will enter the recording pause mode when you release the button.
- To resume recording, press the pause (▮▮) ⑦ or playback (▶ or ◀) ⑰ button.

To erase the recorded contents

1. **Set the REC LEVEL control ③ to the "MIN" position.**
2. **Press the recording (●) button ⑧.**
3. **Press the play (▶ or ◀) button ⑰ or pause (▮▮) button ⑦.**

RECORDING USING MICROPHONE (CT-W630R only)

1. **Connect the right and left plugs of the microphone to the MIC-L/R jacks ⑳.**
2. **Set DOLBY NR switch ⑩.**
3. **Press the recording (●) button ⑧.**
4. **Adjust the recording level and balance.**
5. **Press the playback (▶ or ◀) button ⑰ or pause (▮▮) button ⑦ to start recording.**

NOTE:

Be sure to disconnect the microphone plugs from the MIC-L/R jacks ⑳ when microphone recording is not being carried out. Otherwise, the sound input at INPUT jacks cannot be recorded.

TAPE COPYING

From deck I to deck II

1. **Insert the recorded tape into deck I.**
2. **Insert a blank tape into deck II.**
3. **Set REV MODE selector ⑫.**
4. **Select the transport direction.**

   Tape copy is performed in the direction (forward or reverse) shown by the tape transport indicator. To change the tape transport direction, press the playback (▶ or ◀) button ⑰, then immediately press the stop (■) button ⑱.
5. **Press SYNCHRO COPY button ⑭.**

HIGH SPEED:

To copy the whole tape in a short time.

NORMAL SPEED:

To copy the tape while listening to the sound.

- When listening to the tape during operation, set DOLBY NR switch ⑩.

To Stop Copying

Press the stop (■) button ⑱. (It will affect both decks.)

- This function copies the sound from deck I to deck II.
- You can either copy the whole tape at normal speed while listening to the sound, or at double speed to reduce recording time to one-half.
- No recording level adjustment is required when copying tapes.
- The deck II tape is recorded in the same condition of the deck I tape, regardless of DOLBY NR switch ⑩ position. For example, when copying a Dolby C-type NR encoded tape, the deck II tape is also recorded with Dolby C-type NR. During double-speed copy, all controls become inoperative except the stop (■) button ⑱.
  During normal-speed copy, the deck II recording mute (○) ⑥ and pause (▮▮) button ⑦ also work.
- The tape copy mode is canceled when the end of any one of the tapes is reached, so it is advisable to use tapes of the same length.
- When copying the same material several times, always record it from the original tape. Sound quality will deteriorate if recorded from a copy.

Note on High-Speed Copy
When performing high-speed copy, an interference beep might be recorded if there is a TV nearby. In this case, use normal-speed copy or turn the TV power off.

TIMER RECORDING/PLAYBACK

TIMER RECORDING (Using only deck II)

(Unattended recording from a tuner, etc.)

1. **Insert a blank tape into deck II.**
   Timer recording always begins from the forward direction.
2. **Set DOLBY NR switch ⑩.**
3. **Set REV MODE selector ⑫.**
4. **Press the recording (●) button ⑧.**
5. **Prepare the program source.**
   Set the amplifier input selector to tuner, and tune in the desired broadcasting station.
6. **Adjust the recording level.**
   (See page 11.)
7. **Set the audio timer.**
   Power of all components will go off.
8. **Set TIMER mode selector ⑪ to REC.**
   At the preset time, power will be turned on and recording will start automatically.

- Timer recording will not work if the tape deck is loaded with a cassette whose erasure prevention tabs are removed.
- Operation of audio timers differs depending on the model, so consult the instruction manual of your unit.

TIMER PLAYBACK

(Wake-up playback)

1. **Insert the recorded tape.**
   Timer playback always begins from the forward direction.
2. **Set DOLBY NR switch ⑩.**
3. **Set REV MODE selector ⑫.**
4. **Set the stereo amplifier for tape playback.**
   Adjust the volume level for wake-up playback.
   (Check it by actually playing back the tape.)
5. **Set the audio timer.**
   Power of all components will go off.
6. **Set TIMER mode selector ⑪ to PLAY.**
   At the preset time, power will be turned on and playback will start automatically.

- Playback will be performed on the deck having a tape loaded.
- If cassettes are loaded in both decks, playback will start from deck I, and continue on deck II at the end of the tape (relay playback).
- The blank skip function will work during timer playback, so if an unrecorded portion continues for more than 15 seconds the unit will automatically fast-forward the tape to the beginning of the next selection and resume playback from there.
- Always set DOLBY NR switch ⑩ to the same position used for recording.
- Operation of audio timers differs depending on the model, so consult the instruction manual of your unit.

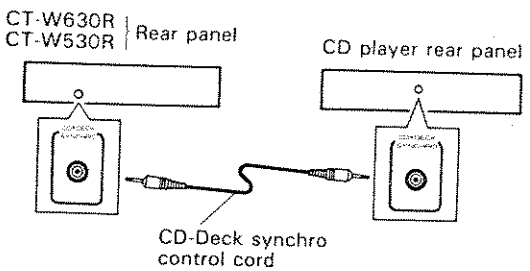
When not performing timer operation, always set TIMER mode selector ⑪ to the OFF position. Otherwise, recording or playback might automatically. Start when turning power on.

CD-DECK SYNCHRO RECORDING

- CD-Deck synchro recording can be carried out when this unit is connected to a Pioneer CD player equipped with a CD•DECK SYNCHRO jack.

Connection

Connect the CD•DECK SYNCHRO jack of this unit to the CD•DECK SYNCHRO jack of the CD player using the supplied CD-Deck synchro control cord.



NOTES:

- *Keep the input and output jacks connected between the amplifier and this unit. Otherwise, the CD synchro recording cannot be carried out.*
- *Even when the CD player is connected to the amplifier with an optical fiber cable, connect the CD player to the amplifier or this unit with the input and output cords with pin plug.*

1. **Load a compact disc into the CD player.**
2. **Load the tape to be used for recording into the cassette deck.**
   Advance the tape to the point from which the recording is to begin.
3. **Press the play button of the CD player.**
4. **Adjust the recording level.**
   (See page 11).
5. **Press the stop (■) button ⑱ of this unit and the CD player.**
   If this unit and the CD player are not in stop mode, CD synchro recording cannot be carried out.
6. **Press CD SYNCHRO button ⑮.**
   The cassette deck begins recording simultaneously with the start of play on the CD player.

When the compact disc finishes playing:

The CD player enters stop mode and the cassette deck enters recording-pause mode and then switches to stop mode after one minute. Change the disc and press the play button on the CD player to resume the recording mode.

When the CD player changes discs (with twin-tray or multi-play CD players):

The cassette deck enters record-pause mode and then starts recording again when the CD player starts playing the next disc. A 4-second blank section is automatically created between selections.

When the end of the tape is reached while the CD player is still playing:

The CD player returns to the beginning of the currently-playing selection and then enters the pause mode. To resume recording, load another tape and check the tape running indicator to ensure that the tape is moving in the desired direction. If not, press the playback (▶ or ◀) button ⑰ to change the tape direction , then immediately press the stop (■) button ⑱. The tape running indicator will change direction. Synchro recording can be resumed by pressing the CD SYNCHRO button ⑮ again. (The CD SYNCHRO button should be pressed within 1 minute. If more than 1 minute elapses, the CD player will enter stop mode.)

NOTES:

- *The CD synchro function only works with Pioneer CD players designed for CD-Deck synchro operation.*
- *Be sure to connect this unit to the CD player using the supplied CD-Deck synchro control cord.*

What type of CD player can be used?

As long as the CD player is a Pioneer CD player designed for CD-Deck synchro operation, any type of CD player, including twin-tray or multi-play CD players, can be used.

Program recording is also possible.

If the desired selections are programmed into the CD player beforehand, recording will be carried out in the programmed order.

Timing of pressing CD SYNCHRO button:

Although recording begins when CD SYNCHRO button ⑮ is pressed, the CD player does not start playing until CD SYNCHRO button ⑮ is released. You can utilize this feature to allow the tape to advance past the leader section before starting CD play or create a non-recorded section on the tape.

TROUBLESHOOTING

Incorrect operations are often mistaken for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after exercising the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Probable Cause	Remedy
POWER		
Cannot turn power on.	• The power plug is removed. • The component (stereo amplifier, audio timer, etc.) to which the power cord is connected is off.	• Insert the power plug correctly. • Turn the stereo amplifier or audio timer on.
CASSETTE DOOR		
The door does not open.	• The deck is not in stop mode (tape is moving). • Power was turned off with the tape moving.	• Press the stop (■) button ⑱. • Turn power on.
The door does not close.	• The cassette is not properly loaded.	• Reinsert the cassette.
PLAYBACK		
Immediately stops.	• The tape is completely wound. • The tape is slack.	• Play back in the opposite direction. • Rewind the tape. • Take up slack (see page 5).
The level meter does not work.	• The tape is not recorded. • **The tape head is dirty.**	• Replace the tape with a recorded one. • **Clean the head (see page 15).**
No sound	• The amplifier input selector is not correctly set. • The amplifier volume level setting is too low. • Connection problems (wrong connection, cord removed, poor contact, broken wire).	• Set the amplifier input selector correctly. • Turn the amplifier volume control up. • Connect securely.
POOR SOUND QUALITY		
Unstable or interrupted sound	• **The head, pinch rollers and capstans are dirty.** • The tape is not uniformly wound.	• **Clean (see page 15).** • Completely fast-forward or rewind the tape.
No high frequencies	• A tape recorded without Dolby NR is being played back with DOLBY NR switch in the B or C position. • **The head is dirty.**	• Set DOLBY NR switch ⑩ to OFF. • **Clean the head (see page 15).**
High frequencies are emphasized.	• A Dolby NR-encoded tape is being played back with DOLBY NR switch in the OFF position.	• Set DOLBY NR switch ⑩ to the same position used for recording.
Sound from previous recordings remains when re-recording a tape.	• **The head is dirty.**	• **Clean the head (see page 15).**
The sound is distorted.	• Recording level is too high. • The recorded signal itself is distorted. • **The head is dirty.**	• Turn REC LEVEL control ③ down when recording (see page 11). • Replace the cassette. • **Clean the head (see page 15).**
Too much noise	• Hi noise tape is being used. • Incomplete insertion of a connection cord, poor contact. • Recording level is too low. • **The head is dirty.** • The head is magnetized.	• Replace the cassette. • Check connections. • Turn REC LEVEL control ③ up when recording (see page 11). • **Clean the head (see page 15).** • Demagnetize with a head demagnetizer.

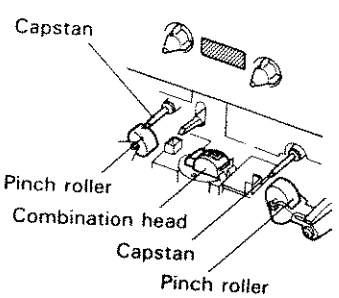
Symptom	Probable Cause	Remedy
RECORDING		
The recording indicator does not light up.	• The cassette erasure prevention tabs are broken.	• Replace the cassette with one whose tabs are intact. • Cover the hole under the tab (see page 5).
The level meter does not work.	• REC LEVEL control is set too low. • The amplifier is not delivering a recording signal (from the tuner, CD player, etc.). • Wrong connection, connection cord removed, poor contact, broken wire.	• Turn REC LEVEL control ③ up. • Set the amplifier recording output selector correctly. • Check connections.
Immediately stops.	• The tape is completely wound up. • The tape is slack.	• Record in the opposite direction. • Rewind the tape. • Take up slack (see page 5).
Cannot record	• **The head is dirty.**	• **Clean the head (see page 15).**
OTHERS		
The music search function does not work.	• Blanks between selections are less than 4 seconds long.	• Use a tape with blanks more than 4 seconds long.
Recording or playback starts suddenly when turning power on.	• TIMER mode selector is set to the PLAY or REC position.	• Set TIMER mode selector ⑪ to OFF.
Cannot use the remote control system (not on European model of CT-W630R)	• The control cord is not connected.	• Connect the control cord.

MAINTENANCE

CLEANING THE HEADS, PINCH ROLLERS AND CAPSTANS

The heads, pinch rollers and capstans are parts which are liable to get dirty quite easily. In particular, if the heads are dirty, the high-frequency components are not reproduced and the stereo balance is impaired, resulting in a deterioration of the playback sound. It is therefore recommended that the head section be cleaned regularly.

1. The POWER switch ① is in the STANDBY position.
2. Depress EJECT button ⑨ and open the cassette door.
3. Dip the cleaning swab into the cleaning fluid and use it to wipe the heads, capstans and pinch rollers.



NOTE:
Do not load a tape after cleaning the head section until the cleaning fluid has completely dried (two or three minutes).

DEMAGNETIZING THE HEADS

After using the cassette deck over a period of time, the heads will become magnetized. The same effect is also caused by bringing a screwdriver, magnet or other magnetized object too near the heads. This causes loss of high-frequency sound during recording and playback, and is also a cause of interference noise. The heads should be regularly demagnetized with a head demagnetizer (eraser) which can be purchased at dealer shops.
When demagnetizing the heads, be sure the cassette deck POWER switch ① is in the STANDBY position. For detailed instructions, consult the operating manual for your head demagnetizer (eraser).

CLEANING THE FRONT PANEL SECTION

Wipe the front panel and the cassette door when dusty or greasy with a soft cloth containing a small amount of ordinary liquid soap. Then, wipe dry with a cloth. Never use volatile spirits like thinners, benzine or alcohol because they will damage the panel finish.

SPECIFICATIONS

System ..... 4 track, 2-channel stereo
Heads ..... "Hard Permalloy" recording/playback head × 1
"Hard Permalloy" playback head × 1
"Ferrite" erasing head × 1
Motor ..... DC servo capstan motor × 2
DC reel motor × 2
Wow and Flutter ..... No more than 0.055% (WRMS) (JIS)
No more than ±0.16% (DIN)
Fast Winding Time ..... Approximately 90 seconds (C-60 tape)

Frequency Response
−20 dB recording:
Metal tape ..... 25 to 18,000 Hz
Chrome tape ..... 25 to 17,000 Hz
Normal tape ..... 25 to 17,000 Hz
Signal-to-Noise Ratio
Dolby NR OFF ..... More than 57 dB

Noise Reduction Effect
Dolby B-type NR ON ..... More than 10 dB (at 5 kHz)
Dolby C-type NR ON ..... More than 19 dB (at 5 kHz)

Harmonic Distortion ..... No more than 1.0% (0 dB)
Input (Sensitivity)
LINE (INPUT) ..... 63 mV (Input impedance 56 kΩ)
MIC (CT-W630R only) ..... 0.4 mV
Output (Reference level)
LINE (OUTPUT) ..... 316 mV (Output impedance 4.5 kΩ)
Headphone ..... 0.25 mW (Load impedance 8 Ω)

Subfunctions

- DOLBY HX PRO recording function (only on deck II of model CT-W630 R)
- DOLBY NR B/C types
- Music search over ±15 selections
- High-speed and normal-speed copy (DECK I→DECK II)
- Relay playback/blank skip
- CD•DECK synchro recording capability
- Microphone jacks (CT-W630R only)
- Peak level meter with peak-hold function
- Automatic space recording mute
- Automatic tape selector
- System remote control available (Not on European model of CT-W630R)
- TIMER Recording
- TIMER Playback (Automatic relay on)

Miscellaneous

Power Requirements
U.S., Canadian models ..... AC 120V, 60 Hz
U.K., Australian models ..... AC 240 Volts~, 50/60 Hz
European model ..... AC 220 Volts~, 50/60 Hz
Multi-voltage models ..... AC 110V/120V−127V/220V/240V (switchable), 50/60 Hz

Power Consumption
CT-W630R 24W
CT-W530R 23W
Dimensions
CT-W630R ..... 420(W) × 128(H) × 268(D) mm
16-9/16(W) × 5-1/16(H) × 10-1/2(D) in
CT-W530R:
(except European model) ... 420(W) × 123(H) × 268(D) mm
16-9/16(W) × 4-13/16(H) × 10-1/2(D) in
CT-W530R:
(European model) ..... 420(W) × 128(H) × 268(D) mm
16-9/16(W) × 5-1/16(H) × 10-1/2(D) in
Weight (without package) ..... 4.6 kg (10 lb 2 oz)

Accessories

Operating instructions 1
Connection cord with pin plugs 2
Remote control cord
(Not on European model of CT-W630R) 1
CD•DECK synchro control cord 1

NOTE:
Specifications and design subject to possible modifications without notice, due to improvements.

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